THE MANITOBA ECONOMY

PRELIMINARY 2002 PERFORMANCE

MANITOBA
BUREAU OF STATISTICS

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REPORT #4A

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FEBRUARY 13, 2003

CONSUMERS DRIVE ECONOMIC GROWTH IN 2002

HIGHLIGHTS:

- The Manitoba Bureau of Statistics estimates provincial **Real Gross Domestic Product (GDP) growth at 3.1% for 2002.** MBS has improved the measurement of real economic activity in the province by adopting the **Fisher index method**.

- Adjusted for inflation, **Manitoba's GDP growth in 2002 is the highest since 1998.** Strong consumer demand for goods, services and housing are the main factors behind Manitoba's solid economic performance.

- As inflation slowed in 2002, **Manitoba's current dollar GDP growth is estimated at 3.5%** down slightly from growth of 3.7% in 2001.

- **Personal consumer expenditure advanced 3.4% in 2002.** Income gains through new jobs and income tax cuts coupled with low interest rate and price discounting has culminated in strong sales of automobiles, furniture and appliances. At 13.9% growth in 2002, **Manitoba is ranked number one in Canada for motor vehicles sales growth.**

- **Residential construction spending rose 13.3% in 2002**, up from 0.7% in 2001. Activity in both new housing and alterations and improvements on existing stock gained momentum through 2002. **Housing starts increased by 22.1% to 3,617 units in 2002, the highest level since 1989.**

- **Total business investments spending turned around in 2002, growing 2.0%** after declining 1.6% in 2001. Institutional capital projects, especially in the health and education sectors, buoyed non-residential investments. However, for the second year in a row, Manitoba businesses continued to reduce purchases of machinery and equipment, especially on telecommunication and industrial equipment.

- **Exports** were the "Achilles' heel" in 2002, growing by only 0.3%. Sales to non-US destinations slowed significantly last year. Most affected commodities are grains and oilseeds.

- **Labour income increased by 4.2% in 2002.** The province created over 9,000 jobs. Hourly wages rose 2.7%, compared with 2.3% in 2001. Manitoba reported the **lowest unemployment rate in Canada at 5.2%**. Manitoba also recorded the lowest youth unemployment rate at 10.2%.

- **Personal income in Manitoba increased to a record $30.3 billion** in 2002 up from $29.6 billion in 2001. Unincorporated business income and labour income were the key drivers expanding 5.8% and 4.2% respectively. Low interest rates, while stimulating consumer expenditure, dampened earnings from deposit savings, trusted pensions income and other interest bearing assets.

- For the second consecutive year, **personal disposable income is estimated to increase by 3.0%**. Declining provincial and federal income taxes has helped disposable income in 2002.

- **Corporate profits** grew marginally last year following a sharp 5.5% decline in 2001. Falling commodity prices placed downward pressure on profits while strong consumer and housing activity moved corporate profits up.

- **Accrued net farm income decreased slightly in 2002**. This is the first decrease in three years. Total farm cash receipts in 2002 decreased by 3.2% to a level of $3.5 billion. Due to a significant drop in prices for cattle, calves and hogs, livestock receipts decreased 5.1%, the first decrease since 1994. Receipts for crops grew by 13.3% in 2002, due to strong prices for all major grains and oilseeds in the last half of the year. Direct payments to producers decreased $224 million or 58.7% in 2002.

NOTE TO USERS

With this release, MBS has introduced a major change in the calculation of real GDP. **MBS has adopted the Fisher index method** to measure and report volume based economic activity or real GDP. The new real GDP series is **chained** annually to smooth the year-to-year growth rates. MBS previously used the Laspeyres index method to measure real GDP.

Fisher based GDP series is derived by taking the weighted average price level of the fixed year (reference year) and the current year. It is the middle ground between the reference year prices and current prices. As a result, the **real GDP series generated using the Fisher method is one of the most accurate measures of year-to-year growth of the economy**. The reference period for this release is 1997.

One drawback of using the Fisher index is that the resulting volume measures are not additive, which means the sum of Manitoba GDP components do not add to the aggregate. In addition, on a national basis, the sum of the provinces does not add to the Canadian total.

In all subsequent MBS documents, the Fisher index based GDP will be referred to as **"Real GDP (Chained 1997 dollars)**". The purpose and interpretation of this measure has not changed: **It measures inflation-adjusted economic activity.**

Several comparison tables of the Fisher based GDP aggregates and the Laspeyres based GDP aggregates have been provided in **Appendix "A".**

COMPARISON OF CHAINED 1997 DOLLARS AND 1997 PRICES
(annual growth rates)

MANITOBA	1998	1999	2000	2001	2002 Preliminary
Real GDP (Chained 1997 dollars)	4.2	1.8	2.4	1.5	3.1
Real GDP (1997 Prices)	4.2	1.9	2.4	1.6	2.9

Chained 1997 dollars - Fisher Based Real GDP
1997 Prices - Laspeyres Based Real GDP

As is illustrated, there is little difference between Manitoba's real GDP growth rates using the Fisher or the Laspeyres method in this time frame.

A detailed explanation of the Fisher index is provided in **Appendix "B".**

The reporting of exports and imports components in the expenditure accounts have changed with this release. With the switch from the Standard Industrial Classification (SIC) system to the North American Industry Classification System (NAICS) the breakdown between goods and services for exports and imports can no longer be accurately measured.

Another accounting change introduced in this publication is the reporting of indirect taxes on items such as fees for motor vehicle and fishing and hunting licenses. Previously these indirect taxes were reported as consumer spending on the expenditure side of the accounts and as indirect taxes on the income side of the accounts. These fees are no longer considered as a tax item, rather they are now treated as a transfer payment from persons to governments. Consequently they are removed from GDP at market prices.

Similarly, the treatment of land transfer taxes has also changed. Prior to this publication these taxes were treated as taxes on the factors of production. With this publication these taxes have been changed to taxes on products. This will have the effect of changing GDP at basic prices, but will have no impact on GDP at market prices. Land transfer taxes will continue to be a component of the expenditure series for investment in residential construction.

For more information on this publication please contact **Earl Turnbull** at (204) 945-2995. (Eturnbull@mbs.gov.mb.ca)

GRAPHICAL SUMMARY

(!) Real GDP at Market Prices, (Chained 1997 Dollars)

(2) Real Personal Expenditure, (Chained 1997 Dollars)

(3) Real Business Expenditure, (Chained 1997 Dollars)

(4) Real Government Expenditure, (Chained 1997 Dollars)

(5) Real Exports of Goods and Services, (Chained 1997 Dollars)

(6) Real Imports of Goods and Services, (Chained 1997 Dollars)

(7) Labour Income, (Current Dollars)

(8) Accrued Net Farm Income, (Current Dollars)

(9) Personal Disposable Income, (Current Dollars)

TABLE SUMMARY

(1) Real Gross Domestic Product, expenditure-based (Chained 1997 Dollars)

(2) Manitoba Gross Domestic Product, expenditure-based (Current Dollars)

(3) Manitoba Gross Domestic Product, income-based (Current Dollars)

(4) Manitoba Personal Income, sources and disposition (Current Dollars)

(5) Manitoba Farm Income Reconciliation (Current Dollars)

(6) Manitoba Price Indexes (Chained 1997 Dollars)

Appendix "A"

(7) Manitoba Gross Domestic Product, expenditure-based (1997 Prices)

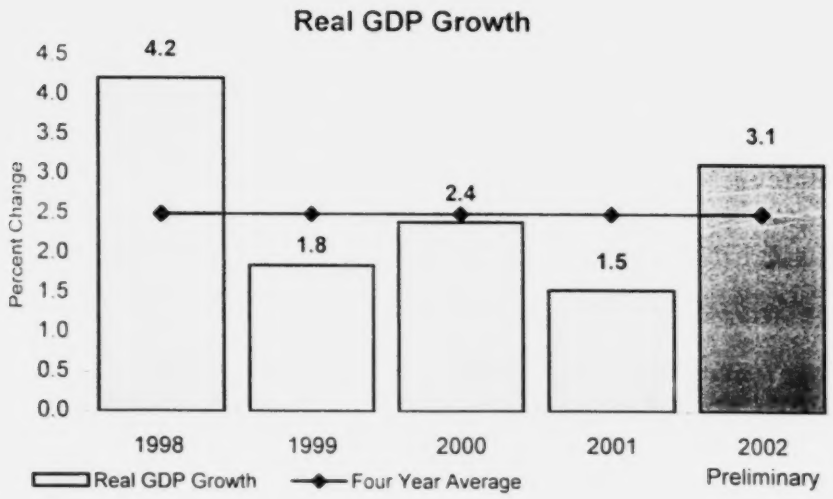
(8) Manitoba Price Indexes (1997 Prices)

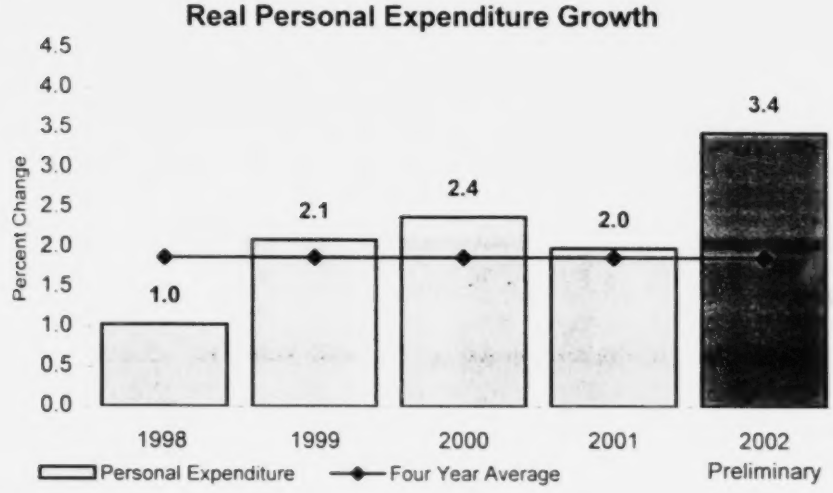
(9) Comparison of GDP Annual Growth Rates between Chained 1997 dollars and 1997 Prices

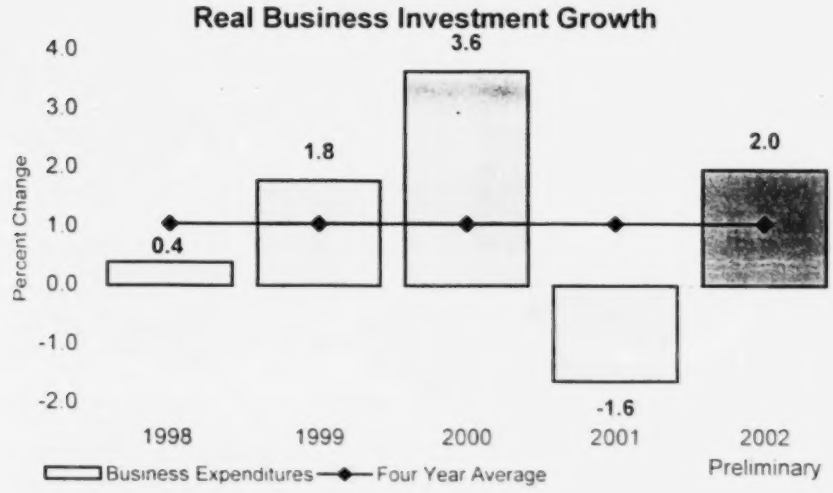
(10) Comparison of Price Index Annual Growth Rates between Chained 1997 dollars and1997 Prices

Appendix "B"

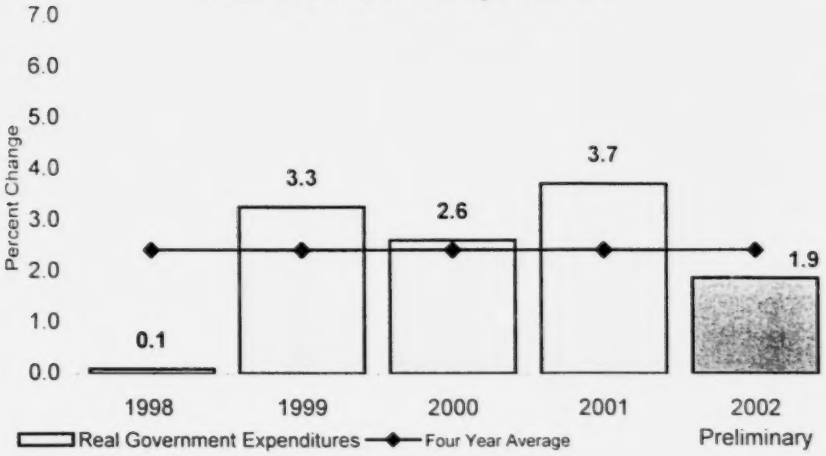
Description of the Fisher Index


Real GDP Growth
Percent Change
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4.2
1.8
2.4
1.5
3.1
1998
1999
2000
2001
2002
Preliminary
Real GDP Growth
Four Year Average


Real Personal Expenditure Growth
Percent Change
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.0
2.1
2.4
2.0
3.4
1998
1999
2000
2001
2002
Preliminary
Personal Expenditure
Four Year Average

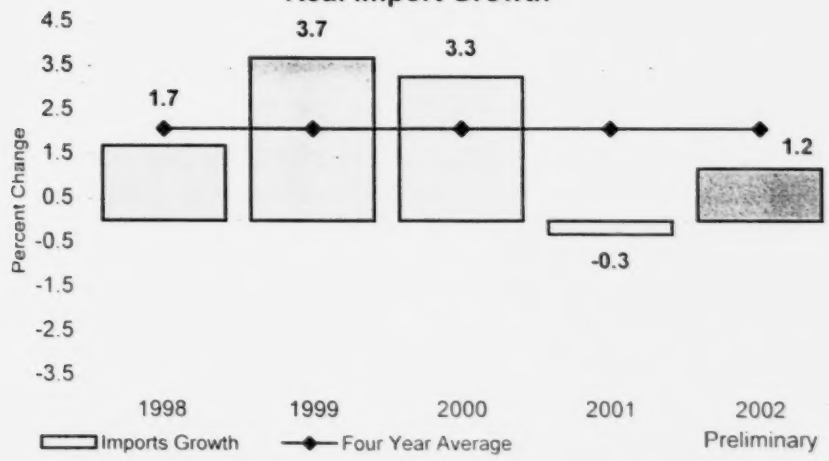

Real Business Investment Growth
Percent Change
4.0
3.0
2.0
1.0
0.0
-1.0
-2.0
0.4
1.8
3.6
-1.6
2.0
1998
1999
2000
2001
2002
Preliminary
Business Expenditures
Four Year Average

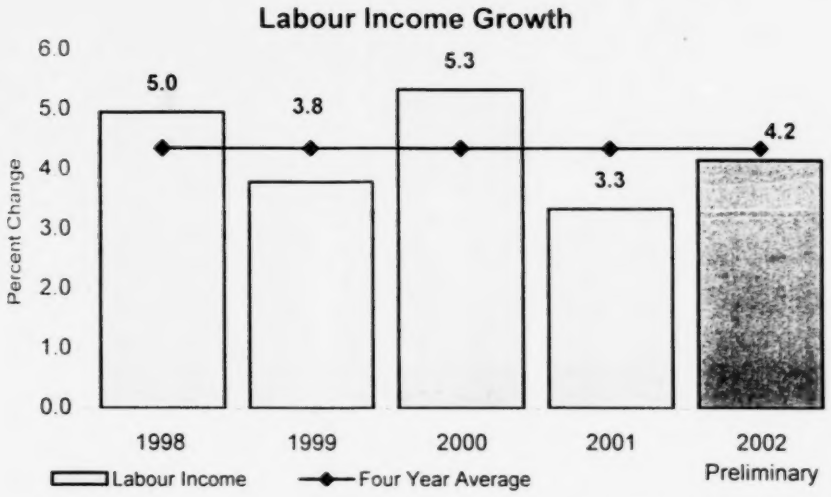
Real Government Expenditures

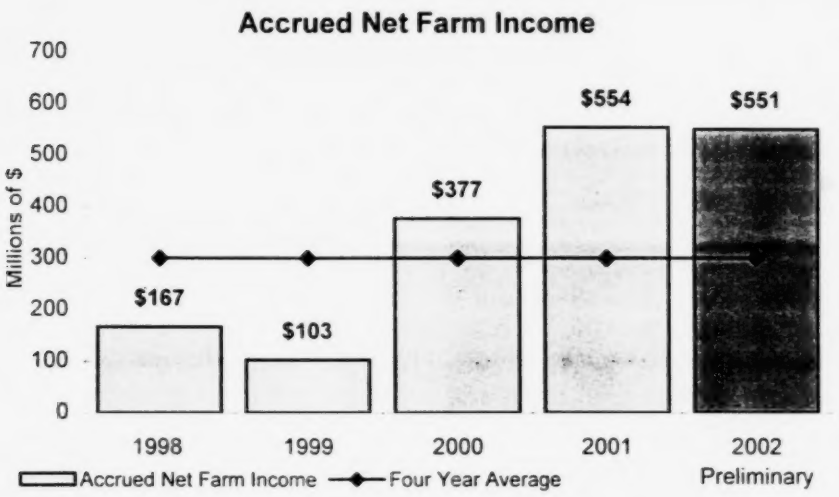


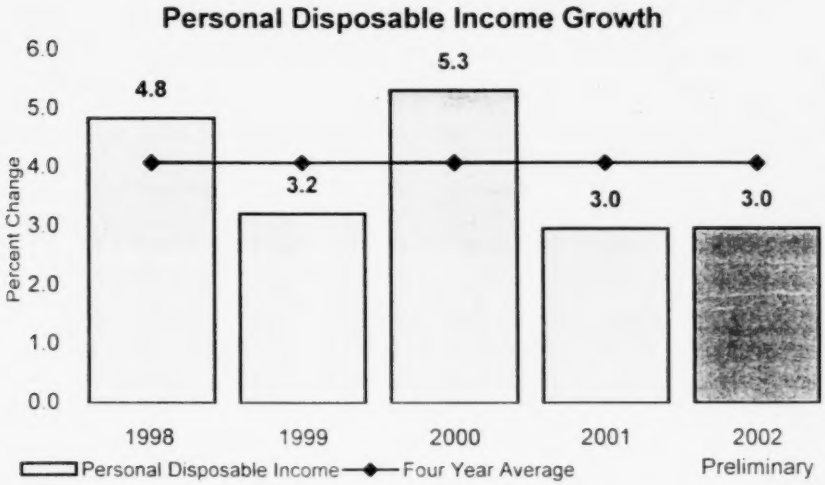
Real Export Growth

Real Import Growth




Labour Income Growth
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Percent Change
5.0
3.8
5.3
3.3
4.2
1998
1999
2000
2001
2002
Preliminary
Labour Income
Four Year Average


Accrued Net Farm Income
700
600
500
400
300
200
100
0
Millions of $
$167
$103
$377
$554
$551
1998
1999
2000
2001
2002
Preliminary
Accrued Net Farm Income
Four Year Average


Personal Disposable Income Growth
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Percent Change
4.8
3.2
5.3
3.0
3.0
1998
1999
2000
2001
2002
Preliminary
Personal Disposable Income
Four Year Average

KEY ECONOMIC INDICATORS
MANITOBA AND CANADA
1998 - 2002

	1998	1999	2000	2001	2002 Preliminary
	(ANNUAL PERCENT CHANGE)				
REAL GDP (Chained $1997)					
GDP AT MARKET PRICES - MANITOBA	4.2	1.8	2.4	1.5	3.1
GDP AT MARKET PRICES - CANADA	4.1	5.4	4.5	1.5	
PERSONAL EXPENDITURE - MANITOBA	1.0	2.1	2.4	2.0	3.4
PERSONAL EXPENDITURE - CANADA	2.8	3.9	3.7	2.6	
EXPORTS OF GOODS AND SERVICES	7.7	2.4	0.7	3.8	0.3
IMPORTS OF GOODS AND SERVICES	1.7	3.7	3.3	-0.3	1.2
EXPORTS PER DOLLAR OF IMPORTS	0.99	0.97	0.95	0.99	0.98
NET TRADE BALANCE LEVEL (Chained $97M)	-288	-553	-1,073	-268	-451
GDP DEFLATOR	-0.2	1.3	2.3	2.2	0.4
CURRENT DOLLARS					
GDP AT MARKET PRICES	4.0	3.1	4.7	3.7	3.5
LABOUR INCOME	5.0	3.8	5.3	3.3	4.2
ACCRUED NET FARM INCOME	-30.7	-38.5	267.8	46.8	-0.5
TOTAL PERSONAL INCOME	4.4	2.8	5.8	3.7	2.4
TOTAL PERSONAL DISPOSABLE INCOME (AFTER TAX)	4.8	3.2	5.3	3.0	3.0

MANITOBA BUREAU OF STATISTICS
February 2003

TABLE 1

REAL MANITOBA GROSS DOMESTIC PRODUCT
EXPENDITURE-BASED
1997 - 2002

	1997	1998	1999	2000	2001	2002 Preliminary
	(MILLIONS OF CHAINED 1997 DOLLARS)					
PERSONAL EXPENDITURE	18,622	18,814	19,208	19,666	20,057	20,748
		1.0	2.1	2.4	2.0	3.4
GOVERNMENT EXPENDITURE	6,692	6,698	6,917	7,098	7,361	7,500
		0.1	3.3	2.6	3.7	1.9
GOVERNMENT INVESTMENT IN CAPITAL	590	606	763	716	752	779
		2.8	25.9	-6.2	5.0	3.6
STRUCTURES	413	437	529	428	473	468
		5.9	21.0	-19.2	10.6	-1.0
MACHINERY AND EQUIPMENT	177	169	235	301	287	324
		-4.7	39.3	27.8	-4.5	12.9
GOVERNMENT INVESTMENT IN INVENTORIES	0	-1	0	1	0	0
BUSINESS INVESTMENT	4,789	4,808	4,894	5,073	4,990	5,088
		0.4	1.8	3.6	-1.6	2.0
RESIDENTIAL STRUCTURES	1,056	1,046	1,007	1,025	1,032	1,169
		-1.0	-3.7	1.8	0.7	13.3
NON-RESIDENTIAL STRUCTURES	1,441	1,534	1,314	1,097	1,148	1,180
		6.5	-14.3	-16.5	4.6	2.8
MACHINERY AND EQUIPMENT	2,292	2,229	2,579	2,974	2,825	2,744
		-2.8	15.7	15.3	-5.0	-2.9
BUSINESS INVESTMENT IN INVENTORIES	380	381	333	621	-203	134
NON-FARM	584	300	314	343	-135	73
FARM	-204	80	11	287	-64	67
EXPORTS OF GOODS AND SERVICES	17,697	19,055	19,503	19,635	20,378	20,440
		7.7	2.4	0.7	3.8	0.3
EXPORTS TO OTHER COUNTRIES	8,939	9,738	9,641	9,787	10,029	10,083
		8.9	-1.0	1.5	2.5	0.5
EXPORTS TO OTHER PROVINCES	8,758	9,316	9,862	9,848	10,351	10,359
		6.4	5.9	-0.1	5.1	0.1
DEDUCT: IMPORTS OF GOODS AND SERVICES	19,020	19,343	20,055	20,709	20,646	20,891
		1.7	3.7	3.3	-0.3	1.2
IMPORTS FROM OTHER COUNTRIES	9,271	9,559	9,671	10,242	9,586	9,710
		3.1	1.2	5.9	-6.4	1.3
IMPORTS FROM OTHER PROVINCES	9,749	9,781	10,388	10,472	11,051	11,172
		0.3	6.2	0.8	5.5	1.1
STATISTICAL DISCREPANCY	8	-3	32	261	142	44
REAL GDP AT MARKET PRICES	**29,758**	**31,011**	**31,585**	**32,341**	**32,838**	**33,865**
		4.2	1.8	2.4	1.5	3.1
REAL FINAL DOMESTIC DEMAND	30,694	30,927	31,780	32,551	33,165	34,121
		0.8	2.8	2.4	1.9	2.9

TABLE 2

MANITOBA GROSS DOMESTIC PRODUCT
EXPENDITURE-BASED
1997 - 2002

	1997	1998	1999	2000	2001	2002 Preliminary
	(MILLIONS OF CURRENT DOLLARS)					
PERSONAL EXPENDITURE	18,622	19,023	19,778	20,629	21,531	22,632
		2.1	4.0	4.3	4.4	5.1
GOVERNMENT EXPENDITURE	6,692	6,814	7,163	7,614	7,915	8,300
		1.8	5.1	6.3	4.0	4.9
GOVERNMENT INVESTMENT IN CAPITAL	590	610	768	738	777	808
		3.4	25.9	-4.0	5.4	4.0
STRUCTURES	413	443	550	466	518	516
		7.4	24.1	-15.4	11.3	-0.4
MACHINERY AND EQUIPMENT	177	167	218	272	259	292
		-5.7	30.6	24.6	-4.8	12.6
GOVERNMENT INVESTMENT IN INVENTORIES	0	-1	0	0	1	0
BUSINESS INVESTMENT	4,789	4,903	4,959	5,178	5,166	5,377
		2.4	1.1	4.4	-0.2	4.1
RESIDENTIAL STRUCTURES	1,056	1,054	1,037	1,075	1,108	1,285
		-0.2	-1.6	3.7	3.1	16.0
NON-RESIDENTIAL STRUCTURES	1,441	1,568	1,362	1,173	1,251	1,317
		8.8	-13.1	-13.9	6.7	5.2
MACHINERY AND EQUIPMENT	2,292	2,281	2,560	2,930	2,806	2,775
		-0.5	12.2	14.5	-4.2	-1.1
BUSINESS INVESTMENT IN INVENTORIES	380	257	185	494	-219	137
NON-FARM	584	333	332	320	-150	76
FARM	-204	-76	-147	174	-69	62
EXPORTS OF GOODS AND SERVICES	17,697	19,028	19,569	20,498	21,778	21,428
		7.5	2.8	4.7	6.2	-1.6
EXPORTS TO OTHER COUNTRIES	8,939	9,746	9,657	10,285	10,822	10,558
		9.0	-0.9	6.5	5.2	-2.4
EXPORTS TO OTHER PROVINCES	8,758	9,282	9,912	10,213	10,956	10,869
		6.0	6.8	3.0	7.3	-0.8
DEDUCT: IMPORTS OF GOODS AND SERVICES	19,020	19,690	20,542	22,001	22,432	22,843
		3.5	4.3	7.1	2.0	1.8
IMPORTS FROM OTHER COUNTRIES	9,271	9,925	9,958	10,673	10,361	10,554
		7.1	0.3	7.2	-2.9	1.9
IMPORTS FROM OTHER PROVINCES	9,749	9,764	10,584	11,328	12,071	12,289
		0.2	8.4	7.0	6.6	1.8
STATISTICAL DISCREPANCY	8	-3	32	270	150	47
GDP AT MARKET PRICES	**29,758**	**30,941**	**31,913**	**33,420**	**34,666**	**35,886**
		4.0	3.1	4.7	3.7	3.5
FINAL DOMESTIC DEMAND	30,694	31,350	32,668	34,159	35,388	37,117
		2.1	4.2	4.6	3.6	4.9

TABLE 3

MANITOBA GROSS DOMESTIC PRODUCT
INCOME-BASED IN CURRENT DOLLARS
1997 - 2002

	1997	1998	1999	2000	2001	2002 Preliminary
	(MILLIONS OF CURRENT DOLLARS)					
WAGES, SALARIES AND SUPPLEMENTARY LABOUR INCOME	14,939	15,680	16,275	17,146	17,720	18,458
		5.0	3.8	5.3	3.3	4.2
CORPORATION PROFITS BEFORE TAXES	2,320	2,392	2,522	2,717	2,567	2,580
		3.1	5.4	7.7	-5.5	0.5
INTEREST AND MISCELLANEOUS INVESTMENT INCOME	2,594	2,632	2,735	2,950	2,945	2,832
		1.5	3.9	7.9	-0.2	-3.8
ACCRUED NET INCOME OF FARM OPERATORS	241	167	103	377	554	551
		-30.7	-38.5	267.8	46.8	-0.5
NET INCOME OF NON-FARM UNINCORPORATED BUSINESS	2,007	2,119	2,251	2,281	2,402	2,543
		5.6	6.3	1.3	5.3	5.8
INVENTORY VALUATION ADJUSTMENT	-32	-65	-74	-140	-61	-82
TAXES LESS SUBSIDIES ON FACTORS OF PRODUCTION	1,655	1,716	1,729	1,708	1,728	1,775
		3.7	0.8	-1.2	1.2	2.7
NET DOMESTIC PRODUCT AT BASIC PRICES	**23,723**	**24,641**	**25,541**	**27,039**	**27,855**	**28,657**
		3.9	3.7	5.9	3.0	2.9
TAXES LESS SUBSIDIES ON PRODUCTS	2,260	2,336	2,256	2,378	2,451	2,525
		3.4	-3.4	5.4	3.1	3.0
CAPITAL CONSUMPTION ALLOWANCES	3,782	3,961	4,148	4,273	4,509	4,750
		4.7	4.7	3.0	5.5	5.3
STATISTICAL DISCREPANCY	-8	3	-32	-270	-150	-47
GROSS DOMESTIC PRODUCT AT MARKET PRICES	**29,758**	**30,941**	**31,913**	**33,420**	**34,666**	**35,886**
		4.0	3.1	4.7	3.7	3.5
GROSS DOMESTIC PRODUCT AT BASIC PRICES	27,498	28,605	29,657	31,042	32,215	33,361
		4.0	3.7	4.7	3.8	3.6

MANITOBA BUREAU OF STATISTICS
February, 2003

TABLE 4

MANITOBA PERSONAL INCOME
SOURCES AND DISPOSITION
1997 - 2002

	1997	1998	1999	2000	2001	2002 Preliminary
	(MILLIONS OF CURRENT DOLLARS)					
WAGES, SALARIES AND SUPPLEMENTARY LABOUR INCOME*	15,016	15,738	16,286	17,164	17,741	18,480
		4.8	3.5	5.4	3.4	4.2
ACCRUED NET INCOME OF FARM OPERATORS	241	167	103	377	554	551
		-30.7	-38.5	267.8	46.8	-0.5
NET INCOME OF NON-FARM UNINCORPORATED BUSINESS	2,007	2,119	2,251	2,281	2,402	2,543
		5.6	6.3	1.3	5.3	5.8
INTEREST, DIVIDENDS AND MISCELLANEOUS INVESTMENT INCOME	3,516	3,605	3,722	3,931	3,922	3,688
		2.5	3.2	5.6	-0.2	-6.0
CURRENT TRANSFERS:						
FROM GOVERNMENT	4,223	4,475	4,466	4,642	4,835	4,914
		6.0	-0.2	3.9	4.2	1.6
FROM CORPORATIONS	44	38	39	44	45	48
		-13.6	2.6	12.8	2.3	7.0
FROM NON-RESIDENTS	79	84	85	88	92	91
		6.3	1.2	3.5	4.5	-1.2
PERSONAL INCOME	**25,125**	**26,225**	**26,952**	**28,527**	**29,591**	**30,314**
		4.4	2.8	5.8	3.7	2.4
DEDUCT:						
CURRENT TRANSFERS TO GOVERNMENT	5,572	5,725	5,791	6,241	6,643	6,680
		2.7	1.2	7.8	6.4	0.6
EQUALS:						
PERSONAL DISPOSABLE INCOME	**19,553**	**20,500**	**21,161**	**22,286**	**22,948**	**23,634**
		4.8	3.2	5.3	3.0	3.0
DEDUCT:						
PERSONAL EXPENDITURE ON CONSUMER GOODS AND SERVICES	18,622	19,023	19,778	20,629	21,531	22,632
		2.1	4.0	4.3	4.4	5.1
CURRENT TRANSFERS TO CORPORATIONS	211	244	274	337	370	337
		15.6	12.3	23.0	9.8	-9.0
CURRENT TRANSFERS TO NON-RESIDENTS	50	54	57	58	67	69
		8.0	5.6	1.8	15.5	3.7
EQUALS:						
PERSONAL SAVING	670	1,180	1,052	1,262	981	595
		76.1	-10.8	20.0	-22.3	-39.3
PERSONAL SAVINGS RATE	**3.4**	**5.8**	**5.0**	**5.7**	**4.3**	**2.5**

* LABOUR INCOME BASED ON PROVINCE OF RESIDENCE

TABLE 5

MANITOBA FARM INCOME
RECONCILIATION
1997 - 2002

	1997	1998	1999	2000	2001	2002 Preliminary
			(MILLIONS OF CURRENT DOLLARS)			
TOTAL FARM CASH RECEIPTS	3,076	2,962	2,959	3,178	3,648	3,530
		-3.7	-0.1	7.4	14.8	-3.2
CROPS	1,726	1,644	1,415	1,322	1,486	1,684
		-4.7	-14.0	-6.5	12.4	13.3
LIVESTOCK	1,208	1,225	1,329	1,569	1,779	1,688
		1.4	8.4	18.1	13.4	-5.1
DIRECT PAYMENTS	142	92	216	287	382	158
		-35.2	134.6	32.9	33.1	-58.7
MINUS: OPERATING EXPENSES	2,318	2,356	2,345	2,528	2,686	2,676
		1.6	-0.5	7.8	6.3	-0.4
= NET CASH INCOME	**758**	**606**	**614**	**650**	**961**	**853**
		-20.0	1.3	5.8	48.0	-11.2
PLUS: INCOME IN KIND	10	9	10	9	9	9
		-7.4	8.0	-5.5	0.2	0.2
MINUS: DEPRECIATION CHARGES	335	351	361	357	362	360
		4.9	2.7	-1.1	1.4	-0.6
= REALIZED NET INCOME	**432**	**264**	**263**	**302**	**609**	**503**
		-39.0	-0.2	14.8	101.6	-17.4
PLUS: VALUE OF INVENTORY CHANGE	-170	-27	-113	120	-2	39
MINUS: AMOUNTS INCLUDED IN OTHER COMPONENTS OF GDP	66	41	45	48	49	48
		-37.9	9.8	6.7	2.1	-2.0
PLUS: FARM CASH ADJUSTMENTS	36	-34	-32	-2	-22	-2
= NET INCOME RECEIVED BY FARM OPERATORS FROM FARM PRODUCTION	**233**	**162**	**74**	**371**	**536**	**492**
		-30.4	-54.5	404.5	44.4	-8.2
PLUS: ADJUSTMENT ON GRAIN TRANSACTIONS	8	5	29	6	18	59
= ACCRUED NET INCOME OF FARM OPERATORS	**241**	**167**	**103**	**377**	**554**	**551**
		-30.7	-38.5	267.8	46.8	-0.5

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MANITOBA ECONOMIC ACCOUNTS
TABLE 5

TABLE 6

MANITOBA PRICE INDEXES
(CHAINED 1997 DOLLARS)
1997 - 2002

	1997	1998	1999	2000	2001	2002 Preliminary
PERSONAL EXPENDITURE	100.0	101.1	103.0	104.9	107.3	109.1
		1.1	1.8	1.8	2.3	1.6
GOVERNMENT EXPENDITURE	100.0	101.7	103.6	107.3	107.5	110.7
		1.7	1.8	3.6	0.2	2.9
GOVERNMENT INVESTMENT IN CAPITAL	100.0	100.6	100.7	103.0	103.3	103.7
		0.6	0.0	2.3	0.3	0.3
STRUCTURES	100.0	101.4	104.0	108.9	109.6	110.3
		1.4	2.6	4.7	0.6	0.6
MACHINERY AND EQUIPMENT	100.0	98.9	92.7	90.4	90.2	90.0
		-1.1	-6.3	-2.5	-0.2	-0.2
BUSINESS INVESTMENT	100.0	102.0	101.3	102.1	103.5	105.7
		2.0	-0.6	0.8	1.4	2.1
RESIDENTIAL STRUCTURES	100.0	100.8	103.0	104.9	107.3	109.9
		0.8	2.2	1.9	2.3	2.4
NON-RESIDENTIAL STRUCTURES	100.0	102.2	103.7	106.9	109.0	111.6
		2.2	1.4	3.1	2.0	2.4
MACHINERY AND EQUIPMENT	100.0	102.4	99.3	98.5	99.3	101.1
		2.4	-3.0	-0.7	0.8	1.8
EXPORTS OF GOODS AND SERVICES	100.0	99.9	100.3	104.4	106.9	104.8
		-0.1	0.5	4.0	2.4	-1.9
EXPORTS TO OTHER COUNTRIES	100.0	100.1	100.2	105.1	107.9	104.7
		0.1	0.1	4.9	2.7	-3.0
EXPORTS TO OTHER PROVINCES	100.0	99.6	100.5	103.7	105.8	104.9
		-0.4	0.9	3.2	2.1	-0.9
DEDUCT: IMPORTS OF GOODS AND SERVICES	100.0	101.8	102.4	106.2	108.7	109.3
		1.8	0.6	3.7	2.3	0.6
IMPORTS FROM OTHER COUNTRIES	100.0	103.8	103.0	104.2	108.1	108.7
		3.8	-0.8	1.2	3.7	0.6
IMPORTS FROM OTHER PROVINCES	100.0	99.8	101.9	108.2	109.2	110.0
		-0.2	2.1	6.2	1.0	0.7
GDP AT MARKET PRICES	100.0	99.8	101.0	103.3	105.6	106.0
		-0.2	1.3	2.3	2.2	0.4
FINAL DOMESTIC DEMAND	100.0	101.4	102.8	104.9	106.7	108.8
		1.4	1.4	2.1	1.7	1.9

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APPENDIX "A"

TABLE 7

REAL MANITOBA GROSS DOMESTIC PRODUCT
EXPENDITURE-BASED 1997 PRICES
1997 - 2002

	1997	1998	1999	2000	2001	2002 Preliminary
	(MILLIONS OF CONSTANT 1997 DOLLARS)					
PERSONAL EXPENDITURE	18,622	18,819	19,220	19,686	20,100	20,830
		1.1	2.1	2.4	2.1	3.6
GOVERNMENT EXPENDITURE	6,692	6,702	6,923	7,109	7,386	7,538
		0.2	3.3	2.7	3.9	2.1
GOVERNMENT INVESTMENT IN CAPITAL	590	606	765	729	760	792
		2.8	26.1	-4.7	4.3	4.3
STRUCTURES	413	437	529	428	473	468
		5.9	21.0	-19.2	10.6	-1.0
MACHINERY AND EQUIPMENT	177	169	235	301	287	324
		-4.7	39.3	27.8	-4.5	12.9
GOVERNMENT INVESTMENT IN INVENTORIES	0	-1	0	0	0	0
BUSINESS INVESTMENT	4,789	4,809	4,900	5,097	5,005	5,094
		0.4	1.9	4.0	-1.8	1.8
RESIDENTIAL STRUCTURES	1,056	1,046	1,007	1,025	1,032	1,169
		-0.9	-3.7	1.8	0.7	13.3
NON-RESIDENTIAL STRUCTURES	1,441	1,534	1,314	1,097	1,148	1,180
		6.5	-14.3	-16.5	4.6	2.8
MACHINERY AND EQUIPMENT	2,292	2,229	2,579	2,974	2,825	2,744
		-2.8	15.7	15.3	-5.0	-2.9
BUSINESS INVESTMENT IN INVENTORIES	380	396	334	556	-275	124
NON-FARM	-204	96	-2	271	-126	52
FARM	584	300	336	285	-149	72
EXPORTS OF GOODS AND SERVICES	17,697	19,044	19,495	19,613	20,373	20,406
		7.6	2.4	0.6	3.9	0.2
EXPORTS TO OTHER COUNTRIES	8,939	9,720	9,640	9,767	10,020	10,037
		8.7	-0.8	1.3	2.6	0.2
EXPORTS TO OTHER PROVINCES	8,758	9,324	9,856	9,846	10,354	10,369
		6.5	5.7	-0.1	5.2	0.1
DEDUCT: IMPORTS OF GOODS AND SERVICES	19,020	19,352	20,059	20,676	20,612	21,011
		1.7	3.7	3.1	-0.3	1.9
IMPORTS FROM OTHER COUNTRIES	9,271	9,561	9,650	10,232	9,570	9,665
		3.1	0.9	6.0	-6.5	1.0
IMPORTS FROM OTHER PROVINCES	9,749	9,790	10,409	10,444	11,041	11,345
		0.4	6.3	0.3	5.7	2.8
STATISTICAL DISCREPANCY	8	-3	32	261	142	44
REAL GDP AT MARKET PRICES	**29,758**	**31,020**	**31,610**	**32,376**	**32,880**	**33,817**
		4.2	1.9	2.4	1.6	2.9
REAL FINAL DOMESTIC DEMAND	30,694	30,937	31,808	32,620	33,251	34,254
		0.8	2.8	2.6	1.9	3.0

TABLE 8

MANITOBA PRICE INDEXES
(1997 PRICES)
1997 - 2002

	1997	1998	1999	2000	2001	2002 Preliminary
			(1997 = 100)			
PERSONAL EXPENDITURE	100.0	101.1	103.0	104.9	107.3	109.1
		1.1	1.8	1.9	2.3	1.6
GOVERNMENT EXPENDITURE	100.0	101.7	103.5	107.1	107.2	110.1
		1.7	1.8	3.5	0.1	2.8
GOVERNMENT INVESTMENT IN CAPITAL	100.0	100.7	100.5	101.2	102.2	102.0
		0.7	-0.2	0.7	1.0	-0.3
STRUCTURES	100.0	101.4	104.0	108.9	109.6	110.3
		1.4	2.6	4.7	0.6	0.6
MACHINERY AND EQUIPMENT	100.0	98.9	92.7	90.4	90.2	90.0
		-1.1	-6.3	-2.5	-0.2	-0.2
BUSINESS INVESTMENT	100.0	102.0	101.2	101.6	103.2	105.6
		2.0	-0.7	0.4	1.6	2.3
RESIDENTIAL STRUCTURES	100.0	100.8	103.0	104.9	107.4	109.9
		0.8	2.2	1.8	2.4	2.4
NON-RESIDENTIAL STRUCTURES	100.0	102.2	103.7	106.9	109.0	111.6
		2.2	1.4	3.1	2.0	2.4
MACHINERY AND EQUIPMENT	100.0	102.4	99.3	98.5	99.3	101.1
		2.4	-3.0	-0.7	0.8	1.8
EXPORTS OF GOODS AND SERVICES	100.0	99.9	100.4	104.5	106.9	105.0
		-0.1	0.5	4.1	2.3	-1.8
EXPORTS TO OTHER COUNTRIES	100.0	100.3	100.2	105.3	108.0	105.2
		0.3	-0.1	5.1	2.6	-2.6
EXPORTS TO OTHER PROVINCES	100.0	99.6	100.6	103.7	105.8	104.8
		-0.4	1.0	3.1	2.0	-0.9
DEDUCT: IMPORTS OF GOODS AND SERVICES	100.0	101.7	102.4	106.4	108.8	108.7
		1.7	0.6	3.9	2.3	-0.1
IMPORTS FROM OTHER COUNTRIES	100.0	103.8	103.2	104.3	108.3	109.2
		3.8	-0.6	1.1	3.8	0.9
IMPORTS FROM OTHER PROVINCES	100.0	99.7	101.7	108.5	109.3	108.3
		-0.3	2.0	6.7	0.8	-0.9
GDP AT MARKET PRICES	100.0	99.7	101.0	103.2	105.4	106.1
		-0.3	1.2	2.2	2.1	0.6
FINAL DOMESTIC DEMAND	100.0	101.3	102.7	104.7	106.4	108.4
		1.3	1.4	2.0	1.6	1.8

TABLE 9

COMPARISON OF CHAINED 1997 DOLLARS AND 1997 PRICES
REAL GROSS DOMESTIC PRODUCT
GROWTH RATES
1998 - 2002

	1998	1999	2000	2001	2002 Preliminary
	(annual growth rates)				
PERSONAL EXPENDITURE					
Chained 1997 dollars	1.0	2.1	2.4	2.0	3.4
1997 Prices	1.1	2.1	2.4	2.1	3.6
GOVERNMENT EXPENDITURE					
Chained 1997 dollars	0.1	3.3	2.6	3.7	1.9
1997 Prices	0.2	3.3	2.7	3.9	2.1
GOVERNMENT INVESTMENT IN CAPITAL					
Chained 1997 dollars	2.8	25.9	-6.2	5.0	3.6
1997 Prices	2.8	26.1	-4.7	4.3	4.3
BUSINESS INVESTMENT					
Chained 1997 dollars	0.4	1.8	3.6	-1.6	2.0
1997 Prices	0.4	1.9	4.0	-1.8	1.8
EXPORTS OF GOODS AND SERVICES					
Chained 1997 dollars	7.7	2.4	0.7	3.8	0.3
1997 Prices	7.6	2.4	0.6	3.9	0.2
IMPORTS OF GOODS AND SERVICES					
Chained 1997 dollars	1.7	3.7	3.3	-0.3	1.2
1997 Prices	1.7	3.7	3.1	-0.3	1.9
REAL GDP AT MARKET PRICES					
Chained 1997 dollars	**4.2**	**1.8**	**2.4**	**1.5**	**3.1**
1997 Prices	**4.2**	**1.9**	**2.4**	**1.6**	**2.9**
FINAL DOMESTIC DEMAND					
Chained 1997 dollars	0.8	2.8	2.4	1.9	2.9
1997 Prices	0.8	2.8	2.6	1.9	3.0

Chained 1997 dollars - Fisher Based Real GDP
1997 Prices - Laspeyres Based Real GDP

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TABLE 10

COMPARISON OF CHAINED 1997 DOLLARS AND 1997 PRICES
PRICE INDEXES GROWTH RATES
1998 - 2002

	1998	1999	2000	2001	2002 Preliminary
		(annual growth rates)			
PERSONAL EXPENDITURE					
Chained 1997 dollars	1.1	1.8	1.9	2.3	1.6
1997 Prices	1.1	1.8	1.9	2.3	1.6
GOVERNMENT EXPENDITURE					
Chained 1997 dollars	1.7	1.8	3.6	0.2	2.9
1997 Prices	1.7	1.8	3.5	0.1	2.8
GOVERNMENT INVESTMENT IN CAPITAL					
Chained 1997 dollars	0.6	0.0	2.3	0.3	0.3
1997 Prices	0.7	-0.2	0.7	1.0	-0.3
BUSINESS INVESTMENT					
Chained 1997 dollars	2.0	-0.6	0.8	1.4	2.1
1997 Prices	2.0	-0.7	0.4	1.6	2.3
EXPORTS OF GOODS AND SERVICES					
Chained 1997 dollars	-0.1	0.5	4.0	2.4	-1.9
1997 Prices	-0.1	0.5	4.1	2.3	-1.8
IMPORTS OF GOODS AND SERVICES					
Chained 1997 dollars	1.8	0.6	3.7	2.3	0.6
1997 Prices	1.7	0.6	3.9	2.3	-0.1
REAL GDP AT MARKET PRICES					
Chained 1997 dollars	**-0.2**	**1.3**	**2.3**	**2.2**	**0.4**
1997 Prices	**-0.3**	**1.2**	**2.2**	**2.1**	**0.6**
FINAL DOMESTIC DEMAND					
Chained 1997 dollars	1.4	1.4	2.1	1.7	1.9
1997 Prices	1.3	1.4	2.0	1.6	1.8

Chained 1997 dollars - Fisher Based Real GDP
1997 Prices - Laspeyres Based Real GDP

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MANITOBA ECONOMIC ACCOUNTS
TABLE 10

APPENDIX "B"

Fisher Indexes in the Manitoba Economic Accounts

What is the Fisher Index?

- When applied to gross domestic product data, the Fisher index is one of a number of methods available to generate a real-dollar estimated of GDP and its components. The other two common methods are the Laspeyres and the Paasche indexes.

- The Fisher Index is an average of the Laspeyres and the Paasche Indexes.

- The Laspeyres price index captures changes in prices by measuring the current price relative to a base period price for a fixed quantity of goods and services that correspond to the base period. **Dividing a nominal GDP amount by the Laspeyres price index yields the base weighted real GDP for any given year.** The problem with this index is that the quantities do not change to reflect changes in actual expenditures in the economy over time. As a result, as relative prices decrease, the growth rate for GDP is overestimated for periods after the base year.

- The Paasche price index measures price changes by using the current year quantities with the current price relative to the base price. **Dividing a nominal GDP amount by the Paasche price index yields the current weighted real GDP for any given year.** The problem with this index is that the quantities change with each year, and so, the index underestimates the magnitude of price changes over time because the quantity changes are partly a result of substitution due to underlying price changes.

- For the economy as a whole, both these price indexes use weighted averages of GDP categories by subsector to determine the quantity. Therefore, the main difference between the two price indexes are the following:

    - For the Laspeyres price index, one year's GDP expenditures are chosen and the weights for each subsector do not change over time.
    - For the Paasche price index, the GDP expenditures change year by year, and so do the weights for each subsector.

- The Fisher index being the average of the fixed weighted and the current weighed mitigates the problems associated with the Laspeyres and the Paasche price indexes. **The Fisher index is referred to as the "ideal index".**

- **If a GDP subsector consists of only one series, the real values calculated using the Fisher, Paasche or the Laspeyres will be identical.** If the GDP subsector consists of many series the real values calculated uses these indexes will be different. The implicit deflator will be different. The magnitude of the difference will depend on the price and quantity shifts within the subsector, the substitution effect.

Why was the change necessary?

- Fisher Index produces the most accurate measure of year-to-year growth in GDP and its components.

- MBS's Manitoba Economic Accounts data will be compatible with Statistics Canada's Provincial Economic Accounts data series

- Canadian system of economic accounting will be in line with the international standards, especially with the US system of National Accounts.

What changes are expected with this release?

- MBS will report volume based real-dollar GDP estimates with a reference period of 1997 as "**real GDP (chained 1997 dollar)**".

- **GDP and its components are not additive.** GDP components will not add up to the total real GDP. In addition, the sum of the provincial GDP series will not add up to the Canadian total.

- Residual Error or statistical discrepancy will contain the difference between the value of an aggregate and the sum of its parts.

- Since base and the current period expenditure volumes are considered, the benchmark period is called **Reference Period** rather than Base Period. The current reference period is 1997 prices.

- Since the GDP subsector bundle of goods and services are continuous updated, the **transition between reference period changes will be smoother.**

- Price indexes will continue to be published. The index will be a ratio of nominal GDP to real GDP (chained 1997 dollars).

Manitoba